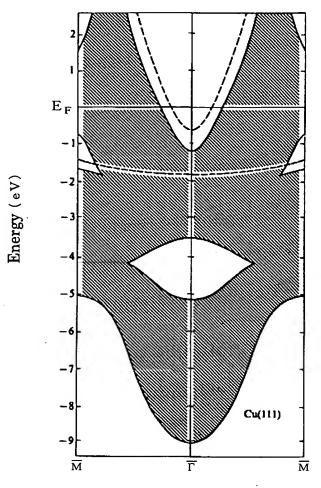
FIG. 1

(a)



(Energy Origin is Fermi Energy.)

(b)

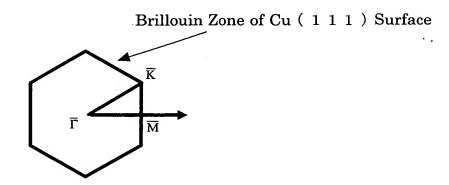
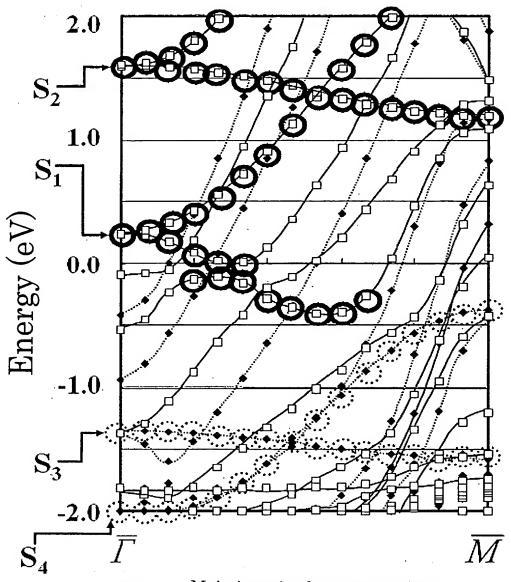


FIG. 2



.......... : Majority spin electron state band

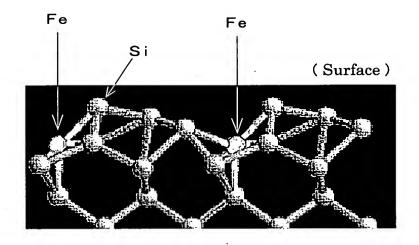
—□— : Minority spin electron state band

...: : Majority spin surface electron state

Minority spin surface electron state

FIG. 3

(a)



(b)

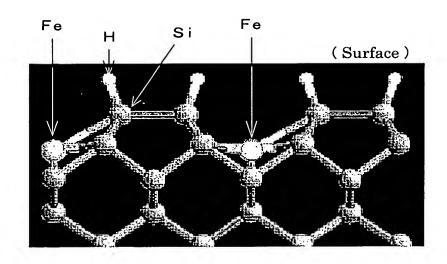


FIG. 4

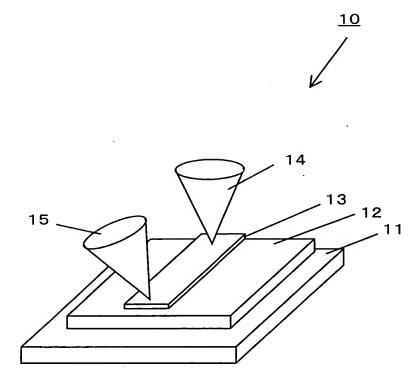


FIG. 5

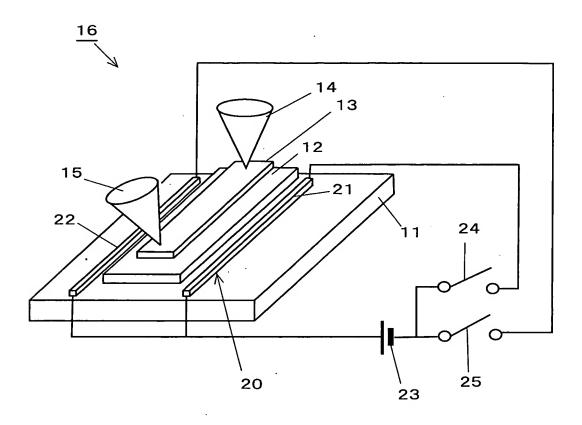


FIG. 6

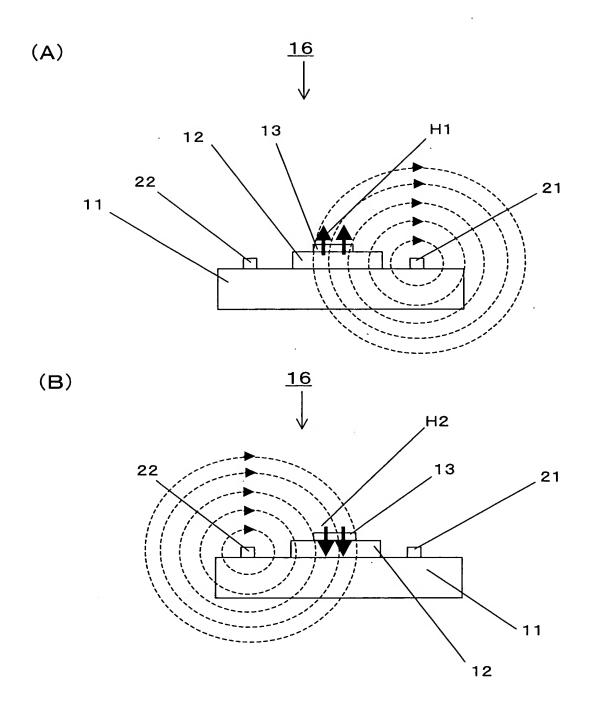


FIG. 7

